CLAIMS

1. Method for connecting components (5), whereby at least one rivet (1) penetrates at least one component (5), and a closing head (6) is molded on the rivet (1) or any given molded part (1) by means of a molding machine,

characterized in that

prior to the deformation of the closing head (6) on the rivet (1) or the given molded part (1), a rivet projection (U) is determined for the respective determination of the molding parameters, such as the molding course, molding time, and molding force.

2. Method for connecting components (5), whereby at least one rivet (1) penetrates at least one component (5), and a closing head (6) is molded on the rivet (1) or any given molded part (1) by means of a molding machine, characterized in that prior to the deformation of the closing head (6) or the given molded part (1), the rivet projection (U) is determined, and deviations of the rivet projection (U) from an allowable value are automatically compensated for by automatic adjustment of the process variables such as molding time or molding course.

3. Method according to Claim 1 or 2, characterized in that to measure the rivet projection, at least one measuring element, in particular two scanning devices, are used, one of the measuring elements

being a rivet header or being attached thereto.

4. Method according to at least one of Claims 1 through 3, characterized in that the rivet projection (U) is calculated in a computing unit from the measured values from the at least one measuring element.

5. Method according to Claim 4, characterized in that after determining the rivet projection (U), a correction factor for the molding process, in particular for the riveting process parameters for determining the molding course, molding time, and molding force, is recalculated in the computing unit for each respective riveting operation.

6. Method according to at least one of Claims 1 through 5, characterized in that the rivet projection (U) is calculated by the computing unit in real time.

7. Method according to at least one of Claims 1 through 6, characterized in that two measuring elements, in particular two scanning devices, are used which are situated on a common measuring axis, these measuring elements being connected to a rivet spindle which supports the rivet header and traverses the riveting stroke.

8. Method according to at least one of Claims 1 through 7, characterized in that the second measuring element, in particular scanning device, transmits a signal to the computing unit and the measured value is filed and stored on the measuring axis of the first scanning device.

9. Method according to at least one of Claims 1 through 8, characterized in that for the rivet projection (U) which is determined from two measured values by use of two measuring elements, the same measuring axis need not correspond to the actual dimensions of the workpiece or the value to be ascertained, but, rather, may be offset with respect to the nominal value that is programmed or represented.

10. Method according to at least one of Claims 1 through 9, characterized in that after the projection (U) of the determined component pair is determined, compensation and adjustment is made for the start of riveting in addition to a molding course and molding time, depending on the change in the rivet projection with respect to the actual value for each riveting operation to be performed.

11. Method according to at least one of Claims 1 through 10, characterized in that before each molding process, in particular before each riveting process, compensation is automatically made for component pairs, in particular, the determination of the rivet projection, and the process parameters for the riveter and/or molding machine are automatically adjusted with respect to the molding operation to be performed, the molding time, and the molding course, depending on the deviation of the value (X) from the allowable and specified rivet projection (U).